

ART. XXIII.—*St. Bartholomew's Hospital Reports*. Edited by Dr. EDWARDS and Mr. CALLENDER. Vol. III. 8vo. pp. xxiv. 486. London: Longmans, Green & Co., 1867.

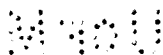
WE have no hesitation in pronouncing this volume to be decidedly the best of those which have been so far published by the staff of St. Bartholomew's. In accordance with the custom of this Journal, we propose to offer our readers an analytical and critical review of the various papers contained in the present volume, and cannot but express our gratification at the outset, at finding the large majority of these papers to be of the class which can only originate from the practical experience of a large hospital, and which is, therefore, peculiarly suited to form the bulk of a volume of hospital reports; we refer, of course, to the class of practical papers founded upon the collected clinical records of long series of cases, which, though common enough in hospitals, are rare in private practice, and concerning which our information must, therefore, be almost exclusively derived from the writings of hospital physicians and surgeons.

Before coming to the strictly professional contents of the volume under review, we find a short, but touching and appreciative biographical notice of the late Dr. Henry Jeaffreson, who died when not quite fifty-seven years old, on the 7th of December, 1866. This sketch is anonymous, but evidently written by a friend who thoroughly knew and recognized Dr. Jeaffreson's noble qualities, both as a man and as a physician. Dr. Jeaffreson's untimely death was from typhus fever, the disease having been acquired while assiduously and affectionately nursing a student of St. Bartholomew's Hospital, whose death anticipated that of his kind teacher but by a few weeks.

May we be excused for referring in this place to the sad event of two years ago, which removed from our own community, by the same fatal malady, one who, like Dr. Jeaffreson, was an excellent hospital physician, and successful clinical teacher, and which enrolled the name of CHARLES PENDLETON TUTT in the brilliant but mournful list of medical men, who, as true martyrs to science, have offered up their lives in the ordinary conscientious discharge of professional duty.

Following the sketch of Dr. Jeaffreson, we come to a paper, the importance and practical value of which cannot be overestimated. This is article I.—*Some Statistics of Pyæmia* by WILLIAM S. SAVORY, F. R. S. Mr. Savory, who has since the publication of the second volume of the Reports, become, by the retirement of Mr. Wormald, full surgeon to St. Bartholomew's, is already well known as a writer on pyæmia, from several excellent papers which he has previously contributed to the first and second volumes of the Reports respectively. Valuable as those papers were, however (and one of them gave full details of twenty-seven carefully-conducted, original experiments), they fade in importance and interest before the present contribution to surgery, which gives the histories in tabular form of no less than one hundred and thirty-three well-marked cases of pyæmia. Our readers can form some idea of the extent and elaboration of these tables, when we state that they occupy fifty-four pages, of small type. With regard to the question whether pyæmia be or be not contagious, Mr. Savory concludes that there is no evidence whatever that it is contagious in the sense in which scarlet fever or smallpox are said to be so.

"There is no evidence that the disease depends upon the introduction into the system of any specific morbid matter from without. Nevertheless, there is the strongest evidence that the disease is sometimes due to the proximity of other cases; but the production of the disease under these circumstances may be otherwise explained. Pyæmia commonly supervenes upon foul wounds, or wounds which furnish decomposing matter. Now, such matter may not only be absorbed into the system furnishing it, and thus provoke pyæmia, but, impregnating the atmosphere, it may be carried to adjacent healthy wounds in other persons, and create morbid action in them, whereby foul matter is again formed and then absorbed. . . . Thus pyæmia may be induced by the proximity of any foul wounds or sores, even perhaps by healthy ones if unduly accumulated within a limited area."



Though pyæmia is often spoken of as a disease of hospitals, it is shown by Mr. Savory's tables that many patients are pyæmic at the time of their admission; it must be remembered besides that the disease is more likely to be recognized and recorded when occurring in the wards of a hospital than when met with in private practice; moreover, those patients whose diseases or injuries particularly predispose them to pyæmia, are precisely those who are generally sent to hospitals for treatment.

Of 132 cases embraced in Mr. Savory's tables, the results of which have been ascertained, twenty-six, or 19.7 *per cent.* are known to have recovered, and 106 or 80.3 *per cent.* to have died. "Perhaps pyæmia is not so constantly fatal as these figures may appear to show"—several cases which recovered having been excluded from the tables, as not being sufficiently marked to warrant their being included. The occasional existence of an eruption in cases of pyæmia, presenting a resemblance to the eruptions of the various exanthemata, is referred to; and the remark made that through these cases the analogy of the affection to other forms of blood-poisoning is most clearly seen. Mr. Savory makes no allusion, however, to the very strong likeness between pyæmia and the disease generally known as gonorrhœal rheumatism, but which should more properly be termed urethral or genital rheumatism, as pointed out in the discussions at the Société Médicale des Hôpitaux de Paris during November and December, 1866, and January and February, 1867.¹ (See *Archives Générales de Médecine*, Mars, 1867, pp. 360-371.) We well remember a case which occurred during our residence as house-surgeon at the Pennsylvania Hospital. A young man had been admitted for incontinence of urine, and we were directed by the surgeon on duty to test his urethra for the existence of stricture by passing bougies, beginning with the smallest and proceeding in gradual succession to the largest in the scale. There was no stricture; the largest bougie entered with perfect facility; but our investigation resulted in an attack of pyæmia, which confined the patient to his bed for many weeks, and which was attended with repeated rigors, profuse sweating, and profound debility, though not with the so-called metastatic abscesses, so frequently met with in this disease.

"Pyæmia not only often occurs, as is well known, without the previous existence of any wound, but sometimes, so far as the most careful and complete examination can show, without any previous suppuration or any other local mischief whatever."

With regard to the causation of pyæmia, Mr. Savory says: "These tables yield but little support to any doctrine which assumes phlebitis or even thrombosis to be a necessary link in the chain of causation." In this remark we quite coincide; indeed we think the question has been settled by Mr. Savory's own experiments, reported in his excellent paper "On the Local Effects of Blood-poisoning in Relation to Embolism," in the first volume of *St. Bartholomew's Hospital Reports*. A great deal of confusion is, we think, maintained upon this point, by not recognizing, or by forgetting that the disease, which we must still call *pyæmia* (though mentally protesting against the term as a misnomer), is not necessarily accompanied by secondary abscesses, or indeed by any local changes whatever; while, on the other hand, secondary abscesses may, and do occur without the existence of pyæmia. That the latter part of this proposition is true, and that well-marked secondary puriform collections may be due to a modified local nutrition, brought about through the agency of the nervous system—in fact, by a process of reflex action, we have endeavoured to show in another place. (See *Proceedings of Pathological Society of Philadelphia*, vol. ii. pp. 180, 181.) On the other hand, we think it but right to say, that, excluding cases of manifest absorption of putrid material, (*septhæmia*, *ichor-rhæmia*) in which death is often too rapid for the development of any local changes, and in which, when such changes do occur, they are secondary and consequent on the blood-poisoning, our individual experience has tended strongly to confirm the theory of Virchow, which, as is well known, makes thrombosis

¹ Perhaps *urethral* or *genital fever* might be a still better name, as there are cases of the disease in question, where the joint symptoms are of but secondary prominence.

and embolism the precedent and true cause of the so-called metastatic formations.

With regard to the cause of the *rigors* or *shivering* so constantly attendant on pyæmia, Mr. Savory inclines to the opinion that they are "the especial sign of the operation of a poison in the blood." We have too often known "rigors, followed by reaction in the form of increased heat of surface, or of perspiration, or of both," dependent on the simple painless catheterization of a healthy urethra, to be willing to subscribe absolutely to this proposition. We have endeavoured, in the paper already referred to, to indicate what is at least a strong analogy between the rigors accompanying the processes of thrombosis and embolism, and the nervous phenomena so often observed in the sudden obstruction of an arterial trunk by the application of a ligature or otherwise. (*Loc. cit.*, p. 181.)

The treatment generally employed in Mr. Savory's cases seems to have been the use of quinia, with free stimulation and careful nourishment. This we believe to be the only rational mode of treatment, as it has certainly, in our own hands at least, been the most successful.

Art. II., by THOMAS HEAD, M. D., is entitled *Observations on the Nature and Medical Treatment of Obstructions of the Bowels, and upon Constipation*. This paper gives the details of twelve cases of more or less intrinsic interest. The writer seems not to have met with, or else not to approve of, the posthumous volume of the late Dr. Brinton on *Intestinal Obstructions* (noticed in the number of this Journal for January, 1868), or he would scarcely characterize, as he does on page 92, the treatment by calomel, colocynth, and croton oil as "most judicious." One practical suggestion of Dr. Head, which we think worth remembering, is to use injections of *large quantities* (not less than three pints) of warmed oil; a preliminary injection, in cases of irritable rectum, having been made of one pint of water with a few drops of laudanum.

We next come to Art. III., *On Convulsions in Children*, by SAMUEL GEE, M. D. This paper is based upon notes of 102 cases, the convulsions in 24 of these being due to local causes, in 73 to general causes, and in 5 to causes the nature of which could not be determined. In those of the first class the diagnosis was confirmed by post-mortem examination in all but two cases, various intra-cranial lesions being discovered which amply accounted for the symptoms observed during life.

Of the second class (73) no less than fifty-six were in children who were likewise afflicted with rickets, and in all of these the convulsions were of the kind called *essential convulsions* (eclampsy). Moreover, of sixty-one cases of *eclampsy*, fifty-six were these cases of rickety children; hence Dr. Gee draws the inference, which is certainly plausible, that rickets is a predisposing cause of eclamptic convulsions. Of the fifty-six cases referred to (compendious but sufficient notes of which are given), only five proved fatal, and in two at least of these there were concomitant circumstances to account for the result. As Dr. Gee's mode of treatment seems to have been very successful, we quote it in his own words, for the benefit of our readers:—

"The method which was uniformly followed may be divided into two parts: (1) during the actual presence of the convulsions, and for about a week afterwards, to give the bromide of potassium or ammonium in doses of (say to a child of a year old) four grains three or four times a day; (2) when the fits have been absent for a week or two, to begin with ol. morrhue and vin. ferri, continuing the sedative salt or not, according to circumstances."

Art. IV., *On the Relation of Life to other Forces*, by W. MORRANT BAKER, is a paper of considerable interest, and evinces a clearness of thought and accuracy of analysis which incline us to think favourably of the author's mental powers. We regret, however, that this essay has not been communicated to the world as a monograph, or through the pages of a journal such as the *British and Foreign Medico-Chirurgical Review*, rather than in a volume of hospital reports, where, to say the least it finds no appropriate place. We cannot say that we have derived any very new ideas from Mr. Baker's lucubrations, nor any suggestions of sufficient practical utility to warrant our transcribing them for

our readers. Still, we are convinced that papers such as that before us are of value, and the subject is certainly of the greatest interest and importance. Mr. Baker's views we believe to be generally correct, though we think he scarcely lays sufficient stress upon the one process which of itself, to our minds, demonstrates the necessary existence of a special vital force, viz., "*the evolution of form from formless matter.*" Those of our readers who may have graduated some years since at the University of Pennsylvania, will remember the emphasis and clearness with which this doctrine was wont to be brought out in the eloquent and brilliant lectures of the distinguished and venerable Emeritus Professor of the Institutes of Medicine in that "*mater matrum,*" the mother of the colleges.

In Art. V. we have *An Illustration of Extensive Cancer, traceable to Dispersion from the Primary Tumour, as Distinguished from its Constitutional Reproduction*, by CHARLES H. MOORE. The case upon which this paper is based is narrated at considerable length, and the exact mode of dispersion of the disease from its original locality clearly traced in the account of the post-mortem appearances. This paper forms a strong argument in defence of the view now rapidly growing in favour with pathologists, that cancer is, at its origin, in all cases a local affection; and that hence, when practicable, its early and complete extirpation is the mode of treatment (*par excellence*) to be adopted. This doctrine of the pathology of cancer has, we may say, met with no more able advocate than Mr. Moore himself, whose excellent pamphlet *On the Antecedents of Cancer* will doubtless rise in the memory of our readers on the mention of this subject.

Art. VI. is *On the Examination of Patients suffering from Deafness*, by THOMAS SMITH. The writer begins by quoting the dictum of a London professor of surgery, which unfortunately represents but too accurately the state of aural surgery with many practitioners in this country as well as in England: "Gentlemen," said the professor, "there are but two kinds of deafness—the one is curable by syringing, the other is not curable at all."

We cannot pretend to follow Mr. Smith in all the details which are embraced in this very useful and practical paper; we must refer our readers to the original, and content ourselves with directing special attention to two or three points which seem to us of peculiar importance. It is well known that some persons who are ordinarily deaf, hear very well when the rattle of machinery or other loud and continued noise hinders people in general from hearing. This Mr. Smith considers an unfavourable sign in estimating the chances of recovery, for the reason suggested by Kramer, viz., that the abnormal ability to hear, under these circumstances, may depend upon the effects of excessive stimulation upon a very dull auditory nerve, *i.e.*, a nerve that, unless abnormally stimulated, could not be made to appreciate sounds.

The "nervous temperament" (so called) is highly unfavourable to the treatment of deafness. The application of a watch to the bones of the head will usually serve as a test to decide whether the fault be in the auditory nerve, or in the bony and other parts of the auditory apparatus; in some cases, however, this test may fail, from a condition of the nerve analogous to colour-blindness in the eye, which may prevent sounds of that particular calibre from being heard, while others are clearly perceptible. The *tuning fork* is sometimes of value in determining whether an obstruction be in the external meatus or in the cavity of the tympanum, since in the former case the resonance of the instrument is increased when it is applied to the bones of the head. Mr. Smith, we observe, expresses a preference for the conical speculum known as "Wilde's;" this is contrary to our own experience, as we have always thought that of the late Mr. Toynbee preferable, if for no other reason, because less apt to give pain, when introduced into a swollen and perhaps acutely inflamed ear.

The next paper is communicated by Dr. J. ANDREW, and is *On Disease of the Mitral Valve*. The text of this paper is a history of a case of marked mitral insufficiency which improved so much and so rapidly under treatment, as to be fairly classed as an instance of recovery. Dr. Andrew properly lays stress upon one point, which, while theoretically conceding, we are all too apt to forget in

practice, viz., that the *murmur* is of much less importance as regards the probable progress and result of the case, than are the other physical and rational symptoms, which are often passed over, particularly in the hurry of prescribing at dispensaries or in the out-patient departments of hospitals. Dr. Andrew's views as to treatment seem to us so important and so judicious, that we transcribe them in full for the benefit of our readers.

"In the treatment of mitral incompetence there are three principal indications, to the more or less complete fulfilling of which our success will be proportioned.

"1. To diminish, as far as possible, the sum total of the blood in the body; for a heart which is unable to transmit a certain quantity of fluid in a given time, may suffer little or no embarrassment, when called upon to deal with a smaller quantity only. This is best accomplished by a diet nutritious but restricted, especially in respect of the quantity of fluid which is taken. This restricted diet is further advantageous by diminishing the risk of over-distension of the stomach and the consequent mechanical interference with the cardiac and respiratory movements.

"2. To maintain the nutrition of the heart and its muscular power, for by doing so we shall obviate to some extent hypertrophy and dilatation with their attendant evils. The continued use of some preparation of iron—the tinct. ferri perchloridi is, I believe, the best—will be of the most essential service; but if iron cannot be borne, quinine or the mineral acids must be substituted for it.

"3. To diminish the frequency and energy of the heart's action. When regurgitation takes place through the mitral orifice, the more numerous and forcible the pulsations of the left ventricle the greater will be the distension of the left auricle and the congestion of the lungs. The patient must religiously avoid all excitement, fatigue, or muscular effort; but the benefits of rest will be greatly increased by the use of digitalis in doses regulated by its effect on the pulse. With proper care it may be employed continuously for long periods without any untoward symptoms being produced by it. A belladonna plaster on the cardiac region sometimes appears useful.

"By this line of treatment we may often do a great deal more than merely palliate the symptoms of heart disease produced by mitral incompetence. But if it is to be effective it must be persevered in for months, and even years, and, above all, must not be lightly exchanged for measures intended to relieve such symptoms as dyspnoea and anasarca. There is no other class of cases in which the temptation to employ means which yield immediate relief is greater, none in which such temporary expedients inflict more permanent harm. If the nutrition of the heart be once impaired, it is too often impossible to redress the injury thus sustained. Of this a sufficient proof is afforded by the numerous cases in which valvular disease exists for many years without causing any serious annoyance, until on the occurrence of some debilitating disease or of profuse hemorrhage, distressing and fatal symptoms are at once developed."

Art. VIII. is a *Report on the Cases of Cholera treated in the wards of St. Bartholomew's Hospital during the Epidemic of 1866*, by WILLIAM CHURCH, M. B., etc. This paper contains tables giving the statistics of one hundred and thirty-six cases which were admitted to the cholera wards of St. Bartholomew's, eighty-one of the number being actually cases of cholera, and the remaining fifty-five being principally of diarrhoea or colic. Forty-four of the former class and four of the latter proved fatal. One curious fact brought out by these tables is that, while the number of admissions of patients suffering from diarrhoea was nearly equal for each day in the week, in the cholera cases the numbers admitted on Monday and Tuesday greatly preponderated. "I cannot help thinking," says Mr. Church, "that this preponderance in favour of the first days of the week may to a certain extent be regarded as a measure of the increased liability to cholera induced by drunkenness, many of the patients admitting that they had been drinking to excess the day, or for several days, before the advent of the choleraic symptoms."

The temperature was noted in thirty-one cases (twenty-two fatal), and the details of seven observations are given in full. "I should consider that the

temperature falling below 94.05 was an indication that the case was severe and the chance of recovery small." "The temperature was taken by placing the thermometer in the axilla. No attempt was made to ascertain the heat of the body by introduction of the thermometer into the vagina or rectum." We cannot but think that the physicians of St. Bartholomew's did right in thus limiting their thermometrical observations; for we cannot suppose that the ascertaining of the temperature of the vagina in women young and old, married or virgin (as has been practised in at least one English hospital) can add an amount of scientific information at all commensurate with the sacrifice of modesty on the part of the unfortunate patients, to say nothing with regard to that of the doctor who makes the observation.

Tables of the post-mortem appearances in nineteen cases where autopsies were made, are appended, and Mr. Church remarks upon the similarity in these as well as in the symptoms of cases which die during collapse, to those presented by patients who suffer from the effects of irritant poisons.

Art. IX. is a *Note on Dr. Roberts' Method of Estimating Diabetic Sugar*, by PHILIP J. HENSLEY, M. A., M. B., etc. Dr. Roberts' rule, we are told, is as follows: "The urine is fermented by means of yeast, its specific gravity having been previously ascertained. In twenty-four hours when the fermentation has ceased and the scum subsided, the density is again taken, and by subtracting this from the density before fermentation, the 'density lost' is ascertained. Then the number of degrees of 'density lost' indicates as many grains of sugar per fluidounce." Mr. Hensley concludes that "if by 'fluidounce measure' be meant that of the British Pharmacopœia, and by 'sugar' be meant glucose in its crystallizable form, Dr. Roberts' rule gives a number slightly too great, but whose excess above the true number is less than its sixty-fourth part."

The criticism which we offered with regard to Mr. Baker's article on the vital force is even more applicable to the present paper by Mr. Hensley. However excellent in itself it seems to us utterly inappropriate in a volume of hospital reports, and as such we could wish that it had been omitted. Mr. Hensley's conclusion is arrived at by means of an abstruse mathematical calculation, which we forbear to quote for the reason that ninety-nine *per cent.* of our readers would skip it as a matter of course, and the remaining one *per cent.* would receive but very questionable edification from its study.

Art. X. is *On the Passage of Certain Substances into the Urine in Healthy and Diseased States of the Kidneys*, by DYCE DUCKWORTH, M. D., etc. Dr. D.'s experiments have been made with iodide of ethyl (C_2H_5I), iodide of potassium, bromide of potassium, indigo, aniline, logwood, turmeric, and santonine, in the case of healthy kidneys; and with santonine, tincture of iodine, iodide of potassium, oil of turpentine, and oil of juniper in cases of Bright's disease. He has ascertained that in a state of health all the substances enumerated may be detected in the urine after ingestion by the stomach, except perhaps turmeric, as to which drug the results were, to say the least, doubtful. In the cases of Bright's disease experimented upon, the substances employed were sometimes detected in the urine and sometimes not: the difference apparently depending on the amount of renal structure affected by the disease.

Dr. Duckworth has found santonine to be easily exhibited, the least unpleasant of all the substances employed, and yielding its action very markedly, even if in the smallest amount. Hence it might be usefully employed as a kind of prognostic test: "The majority of cases in which santonine passed belong to a class which, though we are not perhaps entitled to call them absolutely recoverable, are nevertheless greatly benefited by rest, mild diuretics, and the prolonged use of steel. . . . It is to be noted that in the three cases in which it was not discovered, the dropsy is mentioned as extreme or severe." In one at least of these, death followed a few months after the experiment.

Art. XI., by AUGUSTIN PRICHARD, gives two successful cases of ligature of the external iliac artery for aneurism. In the first case the femoral artery of the opposite limb had been tied four years previously, likewise for aneurism. The ligature of the iliac was followed by suppuration of the sac and a long train of

untoward symptoms the nature of which is not very clearly defined, recovery with a useful limb eventually being obtained. In the second case, recovery was uninterrupted. We observe that Mr. Prichard speaks of employing compression before the operation with a view to promote the establishment of the collateral circulation. We believe this to be unsafe surgery: the risk of gangrene after operations for aneurism is (as has been shown over and over again) *not* from diminution of the arterial supply, but from *venous congestion*, a condition which is always aggravated, if not originally induced, by the preliminary use of compression.

Art. XII. is a paper of unusual interest and importance. It is entitled *Remarks on all the Principal Cases of Injury of the Head admitted into the Hull General Infirmary during the Six Years from 1858 to 1863, inclusive*, by CHARLES JEWEL EVANS. Forty cases, principally of fracture, are detailed in a table the elaboration of which may be inferred, when we state that it occupies no less than thirty-eight pages. "No cases of scalp wound or other injury of the head, however severe—provided they were not followed by concussion or inflammation and its results ending fatally, or accompanied with fracture—are included in the table." Eighteen of the forty cases recovered, while twenty-two proved fatal. All with one exception were in males.

This table is of great value, and will well repay a careful study. Mr. Evans in his remarks takes up *seriatim* the following points, viz., the question of treatment, the discharge of serous fluid from the ear, facial paralysis, the state of the pupils, the state of the respiration, and the condition of the pulse.

With regard to the use of the trephine, he says: "The cases just recorded in which operative measures were employed, are not sufficiently numerous to make any deductions from them of much value; the few, however, which are related in the table go to confirm the opinion—now, I think, generally entertained—that the operation of trephining is not one from which a hopeful result may be often expected." [The trephine was used in six cases, five of which proved fatal, and in the sixth, facial paralysis, which seems to have been the indication for the operation, still persisted at the time of the patient's discharge ten weeks subsequently.] While upon the subject of the operative treatment of injuries of the head, Mr. Evans quotes (we are glad to say with approbation) some remarks of our own on the matter in question, published in the number of this *Journal* for October, 1865, p. 390, and republished in the *Biennial Retrospect of the New Sydenham Society* for 1867.

Mr. Evans believes that the serous fluid discharged from the ear in cases of injury of the head is always of cerebro-spinal origin, and is therefore pathognomonic of the existence of fracture. We deem it but right to say that we think the united testimony of Mr. Prescott Hewett and of Mr. Holmes, that they have actually seen such a discharge in cases where there was no fracture (as proved by *post-mortem* inspection) communicating with either internal or middle ear, and no communication between those cavities, must be considered as establishing at least the possibility of this fluid originating in the tympanic cavity itself. [See *Holmes' System of Surgery*, vol. ii. pp. 131 *et seq.*]

Facial Paralysis, together with hemorrhage from the ear, Mr. Evans likewise considers an evidence of fracture. That aural hemorrhage may occur without fracture has been seen in many cases, among others in one published by ourselves in the *Proceedings of the Pathological Society of Philadelphia* (vol. ii. p. 149); while the existence of paralysis, we think (though we have no observations to prove it), might be accounted for in other ways, even in those cases where it could not be due to extra-cranial nerve injuries. It is true, as Mr. Evans observes, that "lesion of that part of the brain where the nerve takes its origin would probably be attended with immediate paralysis; and further . . . that if this arose from inflammation of the nerve itself it would not gradually pass off as it so frequently does." The gradual formation of a small cerebral clot might, however, we conceive, give rise to the tardily occurring paralysis; while the contraction and partial absorption of the same clot, which would ensue if the hemorrhage ceased and life was prolonged, would naturally permit the diminution and gradual disappearance of the paralysis which it caused.

Although we have thought it right to express our dissent from Mr. Evans' conclusions upon these points, which after all are of very little practical importance, we cannot but thank him for his highly valuable contribution to a branch of surgery which still merits more accurate investigation than it has yet received.

Art. XIII., by W. AINSLIE HOLLIS, M. B., etc., is *On the Value of the Thermometer as an Aid to the Physician*. This paper strikes us as being both practically valuable and well timed. There is no doubt that any brilliant discovery of a new means of physical investigation is very apt (from the constitution of the human mind) to be at first lauded more highly than it may deserve, afterwards perhaps to relapse into still more unmerited neglect. It is in view of this fact that Mr. Hollis has endeavoured to show, in the paper before us, that while the utility of the thermometer as a means of diagnosis and prognosis is indisputable, it must not be exclusively relied upon. We recommend the perusal of this article to our readers, but must confine ourselves in this place to two short quotations: "As a rule," says Mr. Hollis, "even in acute diseases, I rarely exceeded a single observation daily; in chronic cases one or two observations a week were usually sufficient. . . . I cannot allow this subject to pass without strongly reprobating the practice of taking in severe cases several (sometimes even hourly) observations in the day; this 'mimia cura medicæ' (if worthy of the term) can do no commensurate good to science compared with the inconvenience, not to say distress, which it occasions patients who have to submit to it."

"In conclusion, I trust that I have succeeded in showing that thermometric registrations by no means supersede or lessen the value of careful observation of the general symptoms of disease; that variations of temperature may be caused by numerous morbid and vital processes acting simultaneously; and that the real value to be assigned to any given temperature must depend entirely upon a due consideration of the processes which have given rise to it."

Art. XIV. *Extraordinary Anomalous Affection of the Nervous System in a Boy*, by LUTHER HOLDEN, is sufficiently described by its title. The case is exceedingly interesting and is well described. Fortunately for the boy in question, though unfortunately for the cause of science, the anomalous affection of the nervous system from which he suffers gives no immediate prospect of a fatal result; wherefore Mr. Holden, as well as his readers, must remain for the present in ignorance of the true pathology of this curious case.

Art. XV., by PHILIP CHILWELL DELAGARDE, is entitled *Surgical Cases, Devon and Exeter Hospital*. This paper, which may be regarded as a sequel to one which appeared under the same title in the second volume of the reports, we have found of much interest, though its utility is impaired by the want of an index to the volume, which the editors have apparently not thought proper to furnish. A considerable number of cases of cancer are detailed, and the histories of other cases of the same disease which were published in Mr. Delagarde's previous paper are brought down to date.

The author, differing from Mr. Moore and other recent writers, believes in the existence of a *cancerous diathesis*. His practice is not, however, at variance with that of the advocates of the "local origin" theory, for he thinks that by an early and complete removal of the diseased tissue "we may not unreasonably hope for a cure—a cure in so far permanent that the diathesis may not originate another cancerous centre during the remainder of the patient's life. Be it remembered that this latent diathesis, not uncommonly, has been rendered sensible, and has been as it were localized by some external violence, without which there might have been no cancer at all."

Art. XVI. is *On Tracheotomy in Children; its Methods, its Dangers, and its Difficulties*, by F. HOWARD MARSH. "I am convinced," says Mr. Marsh, "that tracheotomy should be regarded as a delicate operation, which requires coolness and caution in its performance, rather than as one that is necessarily either very difficult or very dangerous."

In the very large majority of cases, the surgeon has time enough to perform

the operation with as much deliberation as would be employed in either herniotomy or the ligation of a large artery, such as the femoral; and when the operator "makes haste slowly," which he should always do when practicable, he can avoid the dangers of hemorrhage, etc., and render the proceeding *as an operation* equally harmless with either of those referred to. *Tracheotomy* should always be performed in preference to *laryngotomy*, but whether the opening be made above or below the isthmus of the thyroid gland, is generally a matter of small importance, and may depend upon the disposition of parts in any particular case, or upon the convenience or even fancy of the operator. It is generally stated that the tube worn should be as large as possible; this the author maintains (and we think with reason) to be an erroneous doctrine. It need never be of greater size than the diameter of the cricoid cartilage, which is almost invariably less than that of the trachea. Mr. Marsh recommends the introduction of the tube employed by Dr. Fuller, and known as the "bivalve canula," immediately after the operation; but prefers the ordinary French instrument as a more permanent apparatus, to be substituted for the former on the second day. Full particulars are given as to the steps of the operation, and as to the after-treatment of the patient; and the paper is concluded by the narration of eleven cases illustrative of the various points brought forward in the body of the essay.

PROFESSOR TURNER, in Art. XVII., gives the description of an interesting specimen of *Anchylosis of the Atlas to the Occipital Bone, and of Dislocation and subsequent Anchylosis of the Atlas and Axis*. The author begins by referring to similar specimens in St. Bartholomew's Hospital Museum, and in that of the Middlesex Hospital. He then proceeds to describe the preparation which forms the subject of his paper, and which is to be found in the anatomical museum of the University of Edinburgh. In this specimen, "owing to the backward displacement of the axis, the anterior surface of its odontoid process was separated from its articular facet on the ring of the atlas by an interval of $\frac{3}{10}$ ths of an inch, whilst the distance between its posterior surface and the posterior ring of the atlas was little more than $\frac{2}{10}$ ths of an inch. The spinal canal was therefore divided into two portions, through the posterior and smaller of which the spinal cord and its membranes had been transmitted. The transverse diameter of the posterior portion was also reduced to $\frac{7}{10}$ ths of an inch. From the great diminution in size of the canal in this locality, the cord must either have been considerably atrophied, or much compressed in the antero-posterior direction." Unfortunately there is no history of the patient from whom this specimen was derived. We could wish that Professor Turner's paper were accompanied by a plate or wood-cut, for to nothing does the Horatian maxim, "*Segnius irritant*," etc. apply with greater force than to mere printed descriptions of anatomical preparations.

Art. XVIII. is *A Discussion of the Mechanical Theories which have been advanced to account for the Origin of Pulmonary Emphysema*, by PHILIP J. HENSLEY, M. A., M. B., etc.

It is said that the first step towards knowledge is a willingness to confess ignorance. In this point of view, Mr. Hensley has certainly added to our information, only, however by having rendered it pretty certain that none of the ordinary theories as to the production of emphysema are tenable.

MR. J. ASTLEY BLOXAM contributes Art. XIX., *Respecting the Treatment of Fractures of the Lower Extremities in the Wards under the care of Mr. Paget*. Fractures of the thigh in young children are treated by position only, no apparatus whatever being employed. Fractured patellæ in patients of all ages are treated merely by extending the limb, and placing a sand-bag on either side for support. Fractures of the thigh in adults are treated in the manner recommended by Prof. Hodgen, of St. Louis, which appears to be essentially a modification of the anterior splint of Prof. Nathan R. Smith, of Baltimore, with the superaddition of the ordinary adhesive plaster extending apparatus, which is here called "Swinburn's." Fractures of the leg below the knee are treated with the immovable bandage of plaster of Paris, or, in severe cases, with a rather complicated suspension apparatus, which is not very clearly described.

"Should the fragments not come readily into position and remain there, the tendo-Achillis is divided; and this is almost invariably done in oblique fractures, and in those near the ankle-joint with much displacement. If the fracture is compound, the tendo-Achillis is always divided," etc. In a not very limited experience of the treatment of fractures of the tibia and fibula at the Pennsylvania Hospital and Episcopal Hospital of this city, we have never found this operation necessary, nor can we recall any case in which its performance has been even suggested; hence, with all due respect for Mr. Paget's opinion, as shown by the practice pursued in his wards, we cannot but think the number of cases of fractured leg which call for tenotomy, less than would be indicated by the paragraph which we have quoted.

Art. XX. gives a *Case in which a Large Hydatid Cyst was removed from the Chest, with ultimate Complete Recovery*, by REGINALD SOUTHEY, M. D., etc. This case is, we need scarcely say, one of very great interest, and is very fully and accurately reported.

Art. XXI. embraces *Some Cases of Disease of the Brain*, by JOHN CROCKETT FISH, M. B., etc. Three cases of tuberculous meningitis, one of the simple acute variety of the same disease, and one of abscess of the left lobe of the cerebellum (following upon otorrhœa, with disease of the petrous portion of the temporal bone) are detailed, and the post-mortem appearances in each case described. A few practical remarks are added, with a view of throwing light especially upon the question of diagnosis. There is nothing particularly remarkable in this paper, and yet we have examined it with both pleasure and profit, and think our readers might do the same. The next best thing to case-seeing is case-reading, and he who accurately describes a case (no matter how simple or common-place it may be) is, in our opinion, entitled to a hearing, and is worthy of thanks for having added *something*, although it may be very little, to our common stock of positive information.

Art. XXII., by Mr. PAGET, *Senile Scrofula*, is very short, but full of valuable practical hints and suggestions. The diagnosis between scrofula and cancer, in old persons, is often difficult, though its difficulty is increased by the too prevalent impression that senile scrofula is very rare. With regard to bones and other structures not glandular, it may be observed that redness of surface, tenderness, and local heat, indicate scrofula rather than cancer; while spontaneous pain, if severe, indicates the latter disease rather than the former. "In the diagnosis between scrofulous and primary cancerous lymph-glands in the old, the chief things indicative of cancer are hardness or at least great firmness of substance, close-clustering, deep-seated attachments, pain, and quick increase. The opposites of these conditions, especially when tenderness and external redness are added to them, commonly signify scrofula."

The treatment of senile scrofula should be the same as that for scrofula in the young, though it must be acknowledged that the prospect of benefit is much diminished by the element of age.

We have in Art. XXIII., by Mr. CALLENDER, the first part of what will form when completed a most valuable contribution to our knowledge of *The Anatomy of Brain Shocks*. The whole paper will contain the records of one hundred fatal cases, the post-mortem examinations of which were carefully made during the years 1849-59 by the writer and the late Dr. Kirkes. Mr. Callender divides his cases into three distinct groups, viz:—

- "1. Cases in which pressure on the surface of the brain or on the walls of the ventricles has been the apparent cause of death.
- "2. Cases in which various portions of the brain have been destroyed by disease.
- "3. Cases in which there has been bleeding into various parts of the substance of the brain."

The present instalment of Mr. Callender's paper, which contains forty-seven cases, disposes of the first group, and begins the consideration of the second. Perhaps the most striking point brought out in the pages now under consideration, is the coincidence of convulsive movements with the lesion of the parts

around the corpus striatum, whether from disease of the brain itself, from abscess or bleeding into its tissue, or from the existence of aneurism of the middle cerebral artery.

With regard to the treatment of cases where hemorrhage has taken place upon the surface of the brain, Mr. Callender says: "And here let me add that I would thoroughly confirm the observations of Mr. Prescott Hewett, when he states that he has seldom seen trephining of use in these cases, or in cases of depressed fracture of the bones of the skull, such depression rarely if ever giving rise to the symptoms of compression, extensive hemorrhage, or laceration of the brain usually coexisting. I have never seen an instance in which compression could be assigned solely to such a cause, and the best proof of the rarity of such an occurrence is to be found in the fact that trephining and bone raising for these injuries to the bones of the head have not been practised by the surgeons of St. Bartholomew's during the past six years."

Art. XXIV., by HOLMES COOTE, gives the history of a very interesting case of traumatic femoral aneurism (arterio-venous) in which pressure was employed with, at first, the prospect of a good cure; subsequently, however (through the rough examination of some visitor to the hospital, equally inconsiderate of the patient's good and of the laws of professional courtesy), the pulsation returned and the limb became so swollen and painful that suppuration of the part was feared. The Antyllian operation (laying open the tumour and tying the vessel above and below) was now performed, and eight days later the thigh was amputated for secondary hemorrhage, the patient, however, sinking a few hours after the latter operation. In the *Transactions of the Philadelphia College of Physicians*, for Feb. 1, 1865 (vol. iv., n. s., pp. 137-141), may be found a somewhat similar case reported by ourselves, where the "old" or Antyllian operation was performed for traumatic aneurism of the brachial artery, secondary hemorrhages afterward necessitating amputation at the shoulder-joint, and the patient eventually dying of sheer exhaustion and loss of blood.

We are no advocates for the use of pressure in any case of aneurism where the ligature can be applied with a reasonable prospect of success; least of all should we be disposed to dally with compression in cases of a traumatic origin; in these we believe the question of treatment to lie between immediate amputation and the Antyllian operation, of late so brilliantly illustrated by Prof. Syme, of Edinburgh. The latter procedure, though far from being free from risk, presents, of course, the great advantage that it offers a prospect of saving the limb, and for such an object almost any risk is justifiable. Amputation would, however, be the safer remedy; and if the patient, upon a full comprehension of the state of affairs, should give his consent to its performance, it would, in our opinion, be the proper mode of treatment for adoption.

Art. XXV. and last, is called *The Hospital Statistics*, and gives five tables and two sub-tables, selected from the annual report of the Registrars, Dr. EDWARDS and Mr. WILLETT. These tables are of much interest, and are printed under the following headings. 1. Showing the whole number of medical cases under treatment, with the results. 2. Showing the whole number of surgical cases under treatment, with the results. 3. Sub-table of fractures and dislocations. 4. Sub-table showing total number of cases of erysipelas, pyæmia, etc. 5. Statement of disease occurring within the hospital in patients admitted for other diseases. 6. Disease occurring within the hospital—sub-table complications. 7. Causes of death in thirty-seven patients after operation.

We have thus concluded our examination of the third volume of St. Bartholomew's Hospital Reports, and think our readers will agree with us that it is not only the best of its series, but unsurpassed by any similar work in the whole range of medical literature. The papers, with very few exceptions, are just what are wanted in a volume of Hospital Reports, and even those exceptions, though out of place in their present association, are of no little intrinsic merit. We miss the lithographic plates which we have been used to in the other volumes of the series, and hope that in the future the editors will not neglect these, while at the same time they omit not the weightier matters of sound doctrine and practical teaching. We want also an *index*; if the contributors

to the Reports realized how much oftener their papers would be referred to and quoted, and how much wider, therefore, would be their sphere of usefulness, *with* an index than *without*, we are sure that the future volumes would not be deficient in this great desideratum.

J. A., Jr.

ART. XXIV.—*Die krankhaften Geschwülste. Dreissig Vorlesungen, etc.* Von RUDOLF VIRCHOW, etc. Zweiter Band. Zweite Hälfte. 8vo. pp. 468. Berlin: Hirschwald, 1865.

Morbid Tumours. Thirty Lectures, etc. By RUDOLF VIRCHOW, etc. Vol. II. Part 2. 8vo. pp. 468. Berlin: Hirschwald, 1865.

IN the numbers of this Journal for January and April, 1865, we presented a *résumé* of such portions of the above work as had then appeared. An apology may seem necessary for so long an interruption in the task we then proposed, and it is found in the delay which has attended the publication of the work itself. We had hoped that the concluding portion of the third volume would have been given to the world long since, and that we might consequently pursue the course we had marked out to its end. But the work remaining still incomplete, and the amount of material accumulating upon our hands, we offer the reader another instalment, in order that, at all events, our proposed plan may not be lost sight of. In the last article, above referred to, we were considering the nineteenth lecture, upon sarcomata, and had noticed their variety, structure, development, course, and prognosis.

We now proceed to take up the sarcomata as they affect the different organs of the body. And first the sarcomata of the bones. These are not designated as osteo-sarcoma—a term reserved for such as resemble more nearly the osteoma. They are divided into two groups—the periosteal or outer, and the inner or medullary; the former are hard, and in them the bony structure is preserved, becoming sometimes even eburnated; the latter are soft, and in their development the bony structure vanishes entirely, or a thin shield of bone alone is left. The capacity of developing ossific processes may be inherent in both, but the periosteal variety presents a bony basis with radiating shoots, while the most marked cases of the medullary form present only a bony shell or cyst, or a meshwork of bone. These distinctions were well marked by Sir Astley Cooper, and our author agrees with him that in one case the periosteum and in the other the medulla is the starting-point of the process, but differs from him in maintaining that the substance of the bone itself becomes involved sooner or later, so that in many instances it is merely a matter of choice whether they shall be designated as periosteal or medullary.

The periosteal sarcomata are divided into three varieties—fibro-, chondro-, and osteoid sarcoma. Their growth commences in the interior layer of the periosteum, the outer layers of which often continue for a long time as a sort of fibrous covering, thus preventing and retarding the growth. The cortical substance of the bone at first remains smooth beneath the tumour, but it soon becomes uneven, as the tumour attacks its surface and produces alterations in its structure to a given depth. If the tumour is situated over cortical substance of some thickness, as in the diaphyses of the long bones, its progress will be interrupted to some extent; if, however, it is situated upon their cancellated structure, as in the epiphyses of the long bones, it will soon extend to the medullary cavity, and then it becomes very difficult to distinguish a periosteal from a medullary sarcoma. The shape of the cells is quite various. The elongated cells are the most common, especially in the external layers; sometimes, however, the whole tumour will seem to be made up of these alone. Sometimes an intercellular substance is almost entirely wanting, and again it may be so developed as to recall the structure of fibroma. In the softer varieties the round cells are found, but more rarely and less diffused. Stellate and reticulate cells are also seldom found in the softer layers, and then not well pronounced; they are quite perfect in the vicinity of the periosteum, and most numerous in the osteoid